

What is claimed is:

1. A method of inhibiting an autoimmune response in a subject comprising administering to said subject an effective amount of an IGF-2 peptide such that said
5 autoimmune response is inhibited.
2. A method of inducing a Th₂ immune response in a subject comprising administering to said subject an effective amount of an IGF-2 peptide such that said
immune response is induced.
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3. A method of inducing tolerance in a subject at risk for developing type I diabetes comprising administering to said subject an effective amount of an IGF-2 peptide such that said tolerance is induced in said subject.
- 15 4. A method of restoring tolerance in a subject suffering from type I diabetes comprising administering to said subject an effective amount of an IGF-2 peptide such that said tolerance is restored in said subject.
5. A method for preventing type I diabetes in a subject comprising administering
20 to said subject an effective amount of an IGF-2 peptide, such that said type I diabetes disease is prevented in said subject.
6. A method for treating type I diabetes in a subject comprising administering to said subject an effective amount of an IGF-2 peptide, such that said type I diabetes is
25 treated in said subject
7. A method of protecting a subject at high risk for developing type I diabetes comprising administering an IGF-2 peptide in an amount effective to protect said subject against said type I diabetes.
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8. A method of treating graft rejection in a subject receiving grafted islet β cells comprising administering to said subject an IGF-2 peptide such that said graft rejection is treated.

9. A method of preventing graft rejection in a subject receiving grafted islet β cells comprising administering to said subject an IGF-2 peptide such that said graft rejection is prevented.

5 10. The method as in one of claims 1-9, wherein said IGF-2 peptide comprises the amino sequence GELVDTLQFVCGDRG (SEQ ID NO:2; B₁₁₋₂₅).

11. A vaccine composition for protecting a subject at risk for type I diabetes comprising an IGF-2 peptide and a pharmaceutically acceptable carrier therefor,
10 wherein said IGF-2 peptide is in an amount effective to prevent said type I diabetes in said subject.

12. A vaccine composition for inducing tolerance in a subject at risk for developing type I diabetes comprising an IGF-2 peptide and a pharmaceutically
15 acceptable carrier, wherein said IGF-2 peptide is in an amount effective to induce tolerance in said subject.

13. The composition as in one of claims 11-12, wherein said IGF-2 peptide comprises the amino sequence GELVDTLQFVCGDRG (SEQ ID NO:2; B₁₁₋₂₅).
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14. A method for transfecting cells of a subject with a nucleic acid molecule encoding an IGF-2 peptide, such that said IGF-2 peptide is expressed in said antigen-presenting cells (such as dendritic cells), comprising:

- 25 (a) isolating said cells from said subject;
(b) introducing a nucleic acid molecule encoding said IGF-2 peptide into said cells such that the gene is expressed in the antigen-presenting cells; and
(c) reintroducing said antigen-presenting cells to said subject.

30 15. A vector comprising a nucleic acid encoding an IGF-2 peptide.